Gender pay gap, voluntary interventions and recession: the case of the British financial services sector

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Abstract

State institutions and trade unions put pressure on the British financial services sector to reform its gendered practices and reduce its gender pay gap following both the recession and the Equality and Human Rights Commission (EHRC) Inquiry (2009). This article considers the effect of these pressures by comparing the gender pay gap pre-, during- and post-recession periods. Using Labour Force Survey data, the article finds a marginal pay gap reduction in the post-recession period, a reduction that was greater in financial services than in the rest of the economy. However the financial services pay gap remained resilient and substantially higher at the top of the earnings distribution. Union membership and collective bargaining were shown to reduce the pay gap including for women members with children. In contrast, countervailing factors, including ethnicity and post-recession longer working hours, contributed to the pay gap. The study reveals the limitations of voluntary interventions against a resilient gendered culture.

1. Introduction

It is ten years since the 2008/9 recession and when financial services was required by the Equality and Human Rights Commission (EHRC) (2009) to voluntarily reform its gendered practices including its gender pay gap, bonus and gendered culture. It is particularly timely to revisit financial services' gender pay gap in the light of the UK Government's aim to 'eliminate the gender pay gap within a generation' (Government Equalities Office, 2016) with pay transparency as a means towards this aim. Government's business-case rationale for focusing on the pay gap is:

> Employers are losing out by not effectively utilising women's academic achievements, experience and talents. Equalising women's productivity and participation rates would make a significant positive impact on our economy. (Government Equalities Office, 2016:4)

The state viewed pay transparency as one solution to the gender pay gap. Initially, voluntary pay gap reporting was required following the *Think Act, Report* (Government Equalities Office, 2015), but did not garner employer support. Secondary legislation followed (section 78 of the Equality Act 2010 (Gender Pay Gap Information) Regulation 2017) requiring private and voluntary sector employers with 250+ employees to report their gender pay gap to Government and publicly on organizations' websites by 5 April 2018. While compliance is compulsory, sanctions for non-compliance were unclear. Moreover, the lead-up to April 2018 was the first time that the majority of organisations examined their pay gaps. This was not the case in financial services where a light was shone on its pay gap and equality practices by the EHRC Inquiry (2009) and subsequently by the Treasury (2010, 2016, 2018) and by unions (see section 2 below). This study shows the change in pre-, during- and post-recession pay gap, in the context of voluntary interventions, and adds to the literature on pay systems post-recession (Stokes et al., 2017). It augments our understanding of sector-specific pay gap studies as opposed to national or regional studies, (Blau and Kahn, 2017; Dex et al., 2008; Drolet and Mumford, 2012; Tomaskovic-Devey, 1993). Moreover, it demonstrates state and union initiatives to change financial services' culture and pay gap. Our rationale for focusing on financial services' pay gap is four-fold: financial services has one of the highest pay gaps in the UK; became the subject of public scrutiny and concern following the 2008/9

economic crisis; was the subject of an EHRC Inquiry in 2008; and has long been recognised for its male gendered culture (McDowell, 2008; Özbilgin and Woodward, 2004).

We begin the article by considering explanations for the pay gap offered in the literature and consider what the implications these separate but related explanations may mean for the financial services' pay gap. We then outline our research questions. Taking a multi-pronged approach (Dickens, 1999), we consider financial services' context, particularly voluntary state (drawing on the EHRC Inquiry and subsequent Treasury reports) and union initiatives, and financial services' organisational culture. We then turn to our empirical analysis of the pay gap over time drawing on Labour Force Survey (LFS) data followed by discussion and conclusions.

2. Explanations for the gender pay gap

Our investigation is shaped by the various interlinked and overlapping explanations of the pay gap. Firstly, gendered differences in human capital (Becker, 1985) stress differential investment in skill acquisition and paid work between men and women. Notwithstanding women's increased investment in education and careers, often exceeding that of men, the human capital approach still has purchase in the literature (Burress and Zucca, 2004), although Blau and Kahn's (2017:789) US study found conventional human capital variables taken together explained little of the pay gap but that occupation and industry remained relevant. We might expect that, if salient, a human capital approach will relate the pay gap to human capital investments in education, marriage, motherhood (rather than parenthood) and to length of service.

Secondly, women and men are often segregated horizontally by doing different work and vertically with one sex (male) dominating the hierarchies (Charles, 2003), so that wage disparities across male and female occupations are explained by gender segregation and devaluation (Murphy and Oesch, 2015). Dex et al. (2008) showed that women's wages grew more slowly than men's wages because they were located disproportionately in lower growth and feminized jobs. From this perspective, we might expect not only that women in female-dominated areas might have a lower level of pay but higher pay when working in male-

dominated jobs and, in view of voluntary interventions, that there would be a reduction in horizontal and vertical segregation over time.

Linked to horizontal and vertical segregation is the third point that workplace practices and systems shape gender pay inequality (Rubery and Grimshaw, 2015; Smithson et al., 2004) and relates to our discussion on unionisation and financial services' culture and practices (below). Following the EHRC Inquiry, we might expect greater attention from managers and unions to workplace practices and pay systems leading to a decline in the pay gap over time.

A fourth explanation, interrelated with the above three points, explains the pay gap as the result of workplace discrimination. Drolet and Mumford (2012) found that a substantial portion of the pay gap in their private sector study in Britain and Canada remains unexplained by the individual characteristics or workplace. We may expect that discrimination will be a further explanation given research on financial services' gendered organisational practices and culture (McDowell, 2008; Özbilgin and Woodward, 2004).

3. Research questions and method

To understand the impact of the EHRC Inquiry in the context of recession, we ask the following question and linked sub-questions: what were the changes in the financial services' pay gap for the period 2003 to 2017 (pre-, during-, and post-recession) with respect to: other sectors in the economy; horizontal and/or vertical segregation; human capital factors; the influence of workplace practices and pay systems including union presence and collective bargaining; and observed (endowment) explanations for the pay gap as compared to unexplained or discrimination reasons?

The financial services context was examined to enable an understanding of the industrial relations (IR) actors' approaches over the period. This involved exploratory interviews and focus groups undertaken with union officials and the TUC, and document sources from unions and Treasury committees. Against this context, we addressed our research questions using a quantitative sectoral investigation outlined in section 5.

4. Financial services context

In 2008, financial services employed 4 percent of the British workforce and provided 1.3 million jobs[i]. The economic crisis led to reduced employment levels of 1.08 million[ii] and redundancies and weaker unions (Gall, 2017). According to the Walker Review (2009) on corporate governance post crisis:

> 'The taxpayer has provided UK banks with nearly £1.3 trillion in support . . . equivalent overall to some 90 percent of UK GDP. Political, taxpayer and social tolerance of practices, including unsafe remuneration policies, which led to this calamitous state, is understandably low.' (Walker, 2009: 90)

Financial services were ripe for reform, not least with respect to governance and pay.

State Interventions

State institutions have played a notable role in reforming financial services' equality context since the recession. Yet, Conley argued the state remains contradictory, ultimately thwarting legal enforcement of equality when its economic authority and the interests of capital are threatened (2012:349). Nevertheless, Dickens posits that state intervention is central to an equality agenda because the market tends to produce discrimination, not equality (1999:13). Thus, we draw specifically on two state institutions which have sought to influence pay and equality in the sector, firstly the enforcement arm of equality legislation, the EHRC and secondly, less commonly used in IR research, the House of Commons Treasury Committees.

The EHRC Financial Services Inquiry and Treasury Committees

The EHRC Financial Services Inquiry was conducted because of the sector's particularly large gender pay gap and unique barriers for women, including long working hours, lack of flexible work, a male-biased culture and the reproduction of differentials among new entrants and because these barriers have persisted despite some attempts to tackle them (EHRC 2009). Moreover, economic turmoil in the financial sector gave rise to fears that inequalities were being exacerbated (EHRC, 2009:22). EHRC used its legal powers under section 16 of the Equality Act, which include mandatory disclosure powers, to access information. The Inquiry is a voluntary mechanism without sanctions, which arguably seeks to shame the sector into action. The subsequent EHRC report made a series of recommendations for increased transparency, improved leadership, better support for staff with caring responsibilities, more consistent monitoring of the

pay and progression of people from different backgrounds, and a clearer articulation of the business-case for 'getting this right' (EHRC, 2009:7). While the Inquiry recommendations are not legally binding, there is an expectation based on EHRC findings and recommendations that organisations 'must have regard to our recommendations'. The powers, which require voluntary compliance rather than regulated compliance, are seen to stimulate change (Hepple, 2011) but signify some ambiguity.

Following the EHRC Inquiry, Treasury committees paid attention to financial services. Benton and Russell (2013) found that such committees strengthen the policy-making process inside and outside government by exposing decision-making to rigorous tests and encouraging careful consideration of options. The 2009-10 Treasury Committee (2010) focused on sex discrimination in financial services drawing on the business-case rationale by acknowledging the need for change to improve corporate governance and oversight within large financial institutions. Part of the debate on corporate governance focused on the lack of diversity on the boards of financial institutions, which 'may have heightened the problems of 'group-think' and made effective challenge and scrutiny of executive decisions less effective' (2010:3). Implicit was the view that more women decision-makers may have avoided the recession.

A further Treasury initiative led to a review by Gadhia (2016) which recommended that executive bonuses are explicitly tied to achieving greater gender balance (2016:47). A key focus was the establishment of the Women in Finance Charter (owned by HM Treasury, 2016:9). Signatories to the Charter voluntarily commit to: women's progression into senior roles, and to publicly report on progress to support transparency and accountability to drive change. The Charter was underpinned by a clear business-case philosophy arguing that 'A gender balanced workforce is good for business – is increasingly being sought by investors, employees, members and customers' (2016:74). Signatory firms determine voluntary targets and are committed to implement four key industry actions to improve women's representation in senior management.[iii]

Financial services organisations.

Multiple sources of evidence reveal that the financial services' culture has long disadvantaged women (Banyard and Lewis, 2009; McDowell, 2010; McDowell and Court, 1994; Özbilgin and Woodward, 2004). The compilations of Davies' media reports[iv] provide

further indications of the resilient hostile culture for women in finance. More recently, culture continued to figure strongly in the Women in Finance Report (Treasury Committee, 2018) which received the majority of written evidence from financial services' organisations (p.45-46). The Report continued to find cultural issues, including women's treatment, bonus culture and presenteeism, persistent concerns and noted that gender and other equalities are not key business objectives (Treasury Committee, 2018). Moreover, it asserted that the 'Alpha-Male' was evident in bonus culture, presenteeism and unconscious bias through persistence of stereotypes and assumptions. Again in the mode of voluntarism, the Committee encourages the financial services sector to consider gender diversity as core to business strategies and to uphold gender diversity as a priority (2018:21).

The evidence provides a dispiriting picture of an organisational culture resistant to change. Nevertheless, financial institutions have made attempts to tackle their 'alpha-male' culture, primarily through their diversity and inclusion units. A striking exemplar is Lloyds Banking group's Inclusion & Diversity Strategy which has top level support with Group Executive Committee members championing the agenda. Lloyds' strategy to improve the pay gap is to increase the proportion of women in senior roles so that 'the gender gaps will reduce over time' (Lloyds Banking Group 2018). Actions to achieve this aim include: a target of 40% senior women by 2020; shortlists to be diverse; agile hiring to encourage broader working patterns; a 'returners' ' programme; training in agile working and unconscious bias; and a women's leadership programme. This strategy has received external recognition: Lloyds was named as: 'Best bank in the world for diversity and inclusion 2017' Euromoney Award; Times Top 50 Employer for Women (2018) plus multiple awards for championing gender diversity including top employer for working families by Timewise[v]. However, the transparency regulations revealed the average (mean) gender pay gap per hour at banks and building societies in the UK is 35 percent and the average (mean) gender pay gap for bonuses at banks in the UK is 52 percent[vi]. Despite their prize-winning diversity initiatives, Lloyds' Banking Group (2018) reported an average mean pay gap figure of 32.8% with a bonus gap of 65.2% which is higher than average for the sector. Pay gap differences were explained by women's under-representation in senior levels. Thus, while diversity initiatives are important they are not closing material gaps between the sexes.

Unions.

Key actors in the dynamics of the gender pay gap are unions, which seek to ensure that equality structures and policies are not separated from IR structures and processes. Pillinger's (2014:4) ETUC study indicated that national level unions have been instrumental in fighting for and implementing legislation to improve pay transparency, for example through company level pay audits, pay surveys, equality plans and income reports. The major union with recognition in UK financial services is Unite the Union with 130,000 members, an estimated union density at 20 percent and collective bargaining at 25 percent (Prosser, 2011). A union wage premium has been associated with high union density (Addison et al., 2017), wide coverage of collective bargaining and multi-unionism (Forth and Millward, 2002). Historically, the wage premium was associated with men as the 'insiders' in the union, however women now outnumber male unionists (Kirton and Healy, 2013) including in Unite. Studies also indicate that unionization generally reduces wage inequality, but the effect might be contingent both on the proportion of women in an industry, on union characteristics and employment conditions (Achatz et al., 2005; Elvira and Saporta, 2001; McGuinness et al., 2011). Moreover, Gall (2017) argues that financial services' unionism was being overwhelmed by challenges from employers pursuing policies based on HRM, partnership and union exclusion and significant restructuring of the sector. Thus, we cannot presume that unions will always have a positive gender effect on the union pay premium.

At organisational level, exploratory interviews with union officials indicated a clear relationship between collective bargaining and equality audits:

> 'The collective bargaining agreements (with major banks) give us . . . our opportunity to push for these organisations to carry out equal pay audits.'

> 'Our work is, you know, eternal vigilance, to keep the pressure on them through the kind of consultative and negotiating structures we have with them, to hold them to account, to make sure some of the very if you like progressive policies that their diversity and inclusion managers talk about are actually put into practice'

The interviews indicated that unions and financial services organisations are adopting integrative/consensual bargaining (as outlined in Williams and Baird's (2014:163) equality bargaining review) through 'routine' sharing of data and regular communications, monthly or quarterly meetings on equality including pay gaps and bonuses.

> ‘we get routinely now is all the data showing the amount of the performance pay rise people have had versus gender, age, ethnicity and so on, the amount of bonus they’ve had, you know, so on average, compared across each grade.’

Officials informed us that bonuses are discretionary so ‘we don’t get to negotiate that (bonuses)’ but they see the statistical patterns with lower grades (where women are concentrated) receiving 10 percent but at the male dominated higher grades it may be 40 percent plus. Moreover, union officials outlined how the equality climate had shifted from negative to more pragmatic with respect to the pay gap:

> . . . there is a grudging acceptance that the way in which banking and finance has been done and by whom it’s been done has to change.

The transparency regulations were cautiously welcomed and a community response was seen as crucial:

> ‘ as long as stakeholders like the trade unions and civic society and others and academics hold these corporate entities to account and make sure they do what they are required, legally required to do, then yeah, I think that will have a benefit. . .’

Turning to union engagement with their representatives, Unite has introduced practical step-by-step guidance on undertaking equality audits, a systematic approach to raise awareness and encourage union representatives to engage with their employers on gender equality and

> ‘assist all Unite Reps including Union Equality Reps, in negotiating with the employer to find out what the situation is in the workplace, how to go about tackling unequal pay between men and women and ensuring that pay systems are transparent’ (UNITE, undated).

Unite also gave evidence to the Women in the City Report (2010) highlighting the long hours’ culture; opaque pay systems - performance/market related pay, bonuses, wide pay bands, anomalies in starting pay and managerial pay; a reluctance to consider managerial roles on a part-time or job-share basis; attitudes to working women; lack of access/encouragement to career development and training; and the ‘old boys’ network’ (2010:Ev46). As the post-recession period took hold, unions were dealing with the fall-out of redundancies. Unite’s 2014 survey found that long hours’ working had intensified; unpaid work beyond agreed contractual hours increased with 74 percent of members experiencing job losses where they work and 60 percent of remaining workers working longer hours, three quarters of whom

were not paid overtime (Survation, 2014). However, no gender analysis was available. The survey led to a campaign that 'Unpaid hours are not acceptable' with linked posters and leaflets. By focusing on *decent* pay, the union is alert to injustice and goes beyond the pay gap focussing on the Living Wage, low pay, insecure work, as well as the gender pay/bonus gap.

A crucial difference between unions' and state pay gap strategies is that unions are more likely to adopt a social justice (see conference motions[vii]) framing rather than the business case framing of state institutions. The above discussion indicates that the conversation on gender equality has intensified among key IR actors since the EHRC Inquiry. Given the attention received by financial services including from Treasury Committees and unions holding financial organisations to account and in the wake of the transparency regulations with respect to the pay gap and gender segregation, we might reasonably expect change over time.

5. Empirical models

Our empirical analysis starts with a widely used Mincer type earning function (Mincer, 1974). In this, pay gap is measured while using (log) hourly pay as a function of female dummy, human capital and job-specific characteristics.[viii] A negative coefficient would indicate a gender pay gap. To decompose the contribution of important factors on pay gaps, we use a standard Oaxaca-Blinder (OB) decomposition technique at the mean proposed by Oaxaca (1973) and Blinder (1973), which has become the key reference for decomposition of pay gaps (Rubery and Grimshaw, 2015, p. 325). This approach estimates the raw pay differentials in the expected value of male and female (log) hourly pay separately for men and women. The pay differentials are then decomposed into two parts (see suppinfo for details). The first part is the endowment effect, the explained part of the pay gap that is due to the differences in observed characteristics at the mean, which is weighted by the coefficients attributable of men. The second part is the unexplained component of pay gap that arises due to the differences in wage between genders attributable to the gender differences in coefficients including intercepts. This unexplained part often called the discrimination effect, i.e. the unequal wage for equally qualified workers (Blau and Kahn, 2017). As the unexplained part includes the effects of labour market discrimination, unobservable variables

(e.g., motivation), and omitted variables, we recognise that particular care should be taken when interpreting the model residual as discrimination (see Ahmed and McGillivray, 2015).

However, pay gaps differ at the lower and upper tails of the wage distribution (see Chzhen and Mumford, 2011). Therefore, to explore pay gaps in lower- and upper-income brackets, and thus identifying the existence of "sticky floor" or "glass ceiling" effects in financial services, we conduct OB type decomposition at selected quantiles. We apply the unconditional quantile regression based on Recentered Influence Function proposed by Firpo et al. (2009) (for details, see Borah and Basu, 2013; Green et al., 2014; Heywood and Parent, 2012).

Data and descriptive statistics

We draw data from the LFS for the period 2003Q1 to 2017Q2. The Office for National Statistics conducts the LFS with a panel design. Each sampled address is interviewed for five waves, and each wave takes place at three monthly intervals where the fifth wave takes place a year after the first. LFS data advantages are its large sample size and large range of variables often consistent for a long time series. Limitations are that LFS data are self-reported, leading to possible inconsistencies in response and do not capture non-wage benefits that increase with seniority.[ix]

First, a respondent is retained in our sample if s/he is employed at the time of the interview (including the self-employed), and also if their age is between 16 and 64 (inclusive). We exclude those who are inactive to avoid obfuscating our analysis by including early retirees and those on long-term sickness benefit (Clark and Lindley, 2009; Nickell, 2004). Second, we collect gross hourly pay information for each of the respondents in their main job. The definition of each variable is in suppinfo table B1. The final sample contains observations of 30,460, of whom 14,213 are men and 16,247 are women. We deflate all monetary values to 2015 (2015 = 100) prices using the UK quarterly consumer price index. The set of explanatory variables that are used include age (8 categories), education (6 categories), ethnicity, tenure, occupation (9 categories), marital status (3 categories), dependent children (5 categories), training, and establishment size (8 categories).

Table 1 reports the descriptive statistics of selected variables for men and women by sub-sample periods: pre- (2003q1-2008q1), during- (2008q2-2009q2), and post-recession (2009q3-2017q2) periods. It shows that real hourly pay of women increased more (£1.85) compared to men (£0.85) from the pre-recession to post-recession period: the differences are statistically significant at 1% level. Differences in educational qualifications between genders are also striking: taking pre-recession period, we observe that there were 48% women compared to only 25% men in the lower three categories of educational qualifications, which had decreased to 39% for women and 20% for men in the post-recession period. The opposite had happened in the case of the highest two categories of educational qualifications: there were 26% (46%) of women (men) in the pre-recession period compared to 37% (56%) in the post-recession period. These differences are also statistically significant. This suggests that after the global financial crisis, the gender-based gap in education is declining (though not vanished) in financial services as more educated women are participating in the sector. Moreover, there is also a stark difference in occupations between the genders over the sample period. For instance, comparing the pre- and post-recession periods, the number of women in the top three occupations has increased by 107% as opposed to 56% of men: in particular, women have gained mostly in the professional and technical jobs – a 44-percentage point increase for women. Though a decreasing trend is visible for both genders in the case of managerial or senior level positions, women have observed a 10% lower decline compared to men. In the post-recession period, 52% of women, as opposed to 20% of men, are in only two *occupations (Sales and Customer Service and Administrative and Secretarial)* (see Olsen et al., 2018 for similar findings). Men are more concentrated in the professional and senior-level positions, implying vertical segregation in financial services. Although still considerable, we see some softening of horizontal and vertical segregation and the gendered acquisition of human capital.

Regressions and Decomposition

Raw and conditional pay differentials

Table 2 shows the difference between the average real hourly pay for men and women. The raw pay differential was 41.3 percentage points in the pre-recession period, indicating a wage differential of $51\%\left(\exp\left(.41\right)\text{-}1\right)\times 100 = 51\%)$; men earned 49% more than women during-recession period, and it further decreased to 44% in the post-recession period, indicating a 7-percentage point reduction in gender pay gap over the sample period. To understand whether

the difference in the pay gap between periods is statistically significant, we run a Chow test. We find that the differences between the coefficients of *Female* in the pre- and post-recession periods is significant at 1% level (*p*-value = 0.001), but insignificant in the pre- and during-recession periods (*p*-value = 0.25), suggesting that the differences in the gender pay gap between pre- and post-recession is statistically significant.

To get conditional pay differentials, we pooled the sample to run an OLS regression while controlling for various economic attributes: these attributes are key to influence the relative pay of women compared to men. The coefficient on the '*female*' dummy variable shows the conditional wage differentials, indicating the unexplained portion of the pay gap after controlling for individual characteristics. The average conditional pay gap has also reduced over the sample period; in pre-recession period, women on average earned 19% less than men; it had decreased to 16% during-recession period and further reduced to 14% in the post-recession period. Put differently, taking post-recession gender pay differential, women earn almost 14 pence less than every £1 earn by men.

The 'unsafe remuneration practices' in financial services were under severe scrutiny during the recession (Walker 2009). As bonuses came down in the recession period, so did the pay gap. As men in financial sector get the lion share of bonuses compared to other sectors, it leads to an interesting question of whether pay gap declined in rest of the economy during-recession. To see the changes in pay gap, we run additional regressions taking the sample of all sectors, excluding financial services. The unreported result shows that pay gap decreases during-recession in the rest of the economy too, but the decrease was 1.6-percentage point more in Financial Services, suggesting that the decline in bonuses might be one potential contributor.

Oaxaca-Blinder decomposition

Table 3 reports the results of the decomposition of OLS estimates at the means for three sub-sample periods[x]. The gender pay differentials corroborate with the earlier raw pay differentials and confirm a marginal reduction in pay gap in financial services. To explore the factors that may have contributed to the pay differentials, the OB decomposition is decomposed into two parts. Taking post-recession sample, the value 0.250 of endowment effect suggests that the differences in the observed characteristics, age, education, occupation, and establishment size account for 68% (=0.250/0.365) of pay differentials, which could be reduced if women had the

same characteristics as their men counterpart. Whereas, the discrimination effect that resulted from the differences in the unobserved parts between genders accounted for 32% of the pay gap, which was 38% in the pre-recession period. The reduction in the discrimination effect indicates some change in financial services.

The contribution of education and occupation on the gender pay gap

The observed factors that contributed most to the endowment effects are education, occupation, and establishment size. In the post-recession period, they explain 20%, 71%, and 8%, respectively, suggesting that higher educational qualifications, managerial positions, and jobs in large companies are important determinants to reducing gender pay gap. The contribution of education and occupation to the pay gap changed little over the sample period.[xi] The unreported detailed decomposition reveals that most of the shift comes from degree qualification and professional and managerial categories of the occupation (see discussion above). Therefore, the results indicate that the greater number of highly educated women in professional and managerial positions is a critical factor in reducing gender pay differentials in financial services. On the other hand, our unreported results for post-recession sample suggest that age, ethnicity, and occupation positively contribute to the discrimination effect.

Distributional decomposition

Table 4 reports the results of distributional decomposition of pay gap using the unconditional quantile regressions for selected quantiles $(q = .10, .25, .50, .75, .90)$. Predictably, the estimated pay gap is higher at the upper tail of the distribution. Though the post-recession pay gap at the 10th quantile is still 0.129 log points (or 13.8%), it reaches 0.462 (or 58.6%) at the 90th quantile. The results of pre- and during-recession periods are also similar. This result is consistent with Chzhen and Mumford (2011) who find a similar effect for the British employees working full-time in 2005. In line with Bell and Van Reenen (2014), we find that greatest inequality is at the top of the wage distribution so that women who break the glass ceiling pay a substantial wage penalty in financial services. The reasons that might widen the pay gap at the top earnings distribution may include firstly, the unconscious bias favouring promoting male colleagues to the top and secondly, that women might be more reluctant to take up top executive positions given the gendered culture. Either of these possibilities suggests an inherent discriminatory environment for women in financial services. Our finding indicates

that policymakers need to target different segments of the pay distribution to reduce the pay gap.

We find that the endowment effect is positive for all three sub-sample periods. It increases up to 25th quantile and then decreases along the earnings distribution. However, the differences diminish from the 50th quantile. It suggests that the differences in productive characteristics contribute to pay gaps in the lower quantile. A large part of the contribution to endowment effect at the 90th quantile is by education and occupation.

Returning to the discrimination effect, we find negative coefficients up to the 25th quantile. It suggests that women at the bottom pay distribution face less earnings discrimination. However, the coefficient turns positive and increases along the earnings distribution from 50th-quantile. It indicates that women on top of the earnings distribution are subject to more discrimination. It implies that the differences in unobservable characteristics are the main drivers in pay gaps at the top of the wage distribution. The discrimination effect at the 90th quantile has marginally decreased (2 percentage points from 70% in pre-recession to 68% in the post-recession period). This decrease may be due to the increasing number of educated women working in financial services who took up professional and technical jobs (see Table 1).

Long working-hour and bonuses

Financial Services' long working hours' culture is closely linked to inequalities. (EHRC, 2011; McDowell and Court, 1994).[xii] Therefore, we collected data on individual's weekly working hours and added this variable in the decomposition. Columns 1-3 of Table 5 shows the results. For brevity, we present the results of the effects of endowment, discrimination, and the newly added variable. Even after controlling for *log(# hours worked),* we find that there is a decline in the discrimination effect over the years. However, in contrast to the observed factors discussed above, *log(# hours worked)* contributes 7% to the endowment effects in the pre-recession period, which has increased to 10% in the post-recession period (with 60% unexplained), indicating that post-recession increase in long working hour practice supports Unite's findings (Survation 2014). In addition, we find the increase in long hours has worsened the gender pay gap.

Since the global financial crisis, performance related pay/additional payment in the form of bonuses in financial services have been in the limelight, although often not engaging with gender differentials. Bell and Van Reenen (2014) finds that increased bonuses and substantial bonus size in financial services, (relative to other sectors) accounts for the wide pay gap at the top of the wage distribution. Moreover, Stokes et al. (2017:20) revealed that the wages of high-earning performance pay workers continued to grow faster during-recession than fixed pay British workers. Our concern is to explore whether additional payments in the form of bonuses widen gender pay differentials. Since LFS data on *additional payment in the form of bonuses* is limited due to respondents' non-responses, these results should be treated with caution. We have re-run decomposition using a reduced sample: Columns 4-6 of Table 5 reports the results. In the pre-recession period, the contribution of bonuses on endowment effect was 8%, which has reduced by 3 percentage points in the post-recession period. However, the post-recession result suggests that 5% gender pay gap, which increases to 7% and 10% at the 75^{th} and 90^{th} percentiles respectively, could have been reduced if women had bonuses similar to their men counterparts. Therefore, further initiatives need to be made in financial services to diminish gender pay differential due to bonuses.

Membership of trade unions

As LFS collects respondents' trade union membership information only in the October-December wave of the survey, we have limited observations to run OB decomposition for our sample period. In this case, we consider two union variables: (i) if an individual is a member of a trade union; and (ii) if pay/conditions are affected by union agreements. We augment our baseline decomposition with these two variables and decompose again. Columns 7-9 of Table 5 report the results. Regarding endowment effects, the variables related to trade union suggest that while being a member of a trade union could reduce pay gap by 3% in the post-recession period, the pay differentials could also have been reduced by 3% if pay/conditions was affected by union agreements (which was 3% and 6% in the pre-recession period, respectively). The results also show that even after controlling for trade union and collective bargaining factors, the discrimination effect has reduced over the sample period in Financial Services. Our unreported regression result shows that women with children who are trade union members, on average, earn higher wages, especially during- and post-recession periods, indicating some equality bargaining success for unions by reducing the pay gap. This finding is noteworthy

given that average wage for women with children rose by 2.3 percent in contrast to 12.6 percent for those without children.

A quasi-experimental approach

Considering the publication of EHRC report as a unique event to the financial services, we apply difference-in-differences-in-differences (DDD) approach as described in Wooldridge (2007). In our case, there are two control groups; therefore, DDD estimator is an appropriate choice as it performs differences-in-differences estimation in each case. The effect of EHRC report on wages is identified by comparing log(hourly pay) of men and women (first difference) in the treated sector (financial services) to the people in the control sectors (rest of the economy) (second difference), before and after the treatment, that is, EHRC report on 2009q3 (third difference).[xiii] Table 6 reports the DDD results. It shows that female wage has increased by 2.6% in Financial Services compared to the rest of the economy after the publication of EHRC report. In other words, gender pay gap has reduced by 2.6% in financial services compared to other sectors in the economy. The result even improves after controlling for all characteristics, time dummies, and sector dummies (full results are available from authors upon request).

6. Discussion and conclusion

We began the article by suggesting that espoused concern at 'unsafe remuneration policies' (Walker, 2009) and the EHRC's (2009) public exposure of the high pay gap, poor equality practices and job segregation in financial services might lead to positive change and a reduced gender pay gap. The article has drawn on state institutions, the EHRC and an unusual contribution to IR research, Treasury committees' reports (2010, 2016, 2018), which demonstrated a preference for voluntarism, or what Gregory-Smith (2018) called self-reforming positive action over formal legislative quotas. Treasury committees focused on improving women's representation in power to challenge the 'group think' that led the financial services lemming-like fall into recession and the consequent huge cost to the British state of bailing out an industry that cannot be seen to fail. Thus, we see the state's contradictory position (Conley 2012) given its preference for voluntary approaches to equality, drawing on compulsory transparency when its economic authority is threatened, but at the same time being ambivalent on penalties for non-compliance.

Our analysis found changes between pre-recession, during-recession and post-recession years, and overall, we found that the pay gap had declined in the post-recession period. Moreover, its decline is greater than the pay gap decline in other sectors in the economy, suggesting that the multi-pronged attention received from different actors in financial services has reaped benefits. Nevertheless, the decline is small, and the gender differentials remain resilient despite both the recession and increased awareness resulting from the EHRC (2009, 2011) Inquiry and subsequent state interventions.

Our deeper analysis of the different explanations of the pay gap revealed a more nuanced picture. We found a slight softening of horizontal and vertical segregation with a smaller proportion of women (and men) continuing to be employed in the lower grades. The fall-out from the recession and the greater attention to gender in financial services may account for the significant increase (44%) of women in professional and technical jobs and the decreasing trend for men and women in managerial or senior level positions. Moreover, our findings concur with Blau and Kahn's (2017) view that gender differences in occupations and the gender division of labour remain important explanatory factors of the pay gap with occupation positively contributing to the discrimination effect.

Moreover, in line with other studies (Bell and Reenen, 2014; Blau and Kahn, 2017), our decomposition revealed that women, who have successfully reached the higher grades in financial services, experienced a pay gap in the upper quartile significantly higher than in the lowest quartile and at the 90th quantile the level of discrimination is greater. The irony is that the more successful and better paid the woman, the greater the penalty in pay she suffered compared to her male comparator. While the pay gap was less at the lower earnings distribution (Dex et al., 2008; Bell & Reenen, 2014), it has remained almost unchanged over the period. Our findings indicate a decline in bonuses in the post-recession period suggesting that the reduction might have come about due to public anger and increased scrutiny over bankers' bonuses since the global financial crisis and/or greater attention to bonus-setting practices. Nevertheless, the bonus gap remained greatest at the most senior levels, where if women got similar bonuses as men, the gender pay differentials would reduce. These findings question the sufficiency of HM Treasury Charter strategy and Lloyds' Bank to increase the proportion of senior level women as a means to reduce the gender gap. Moreover, we expose the subsequent policy neglect of the resilient pay gap at the lower earnings distribution.

On the surface, human capital effects do help explain why men and women in financial services work in different occupations. However, the relationship between high male qualifications with high gender differentials does not explain why highly qualified men are recruited and promoted and highly qualified women are not. The proportion of women graduating now exceeds the proportion of men graduates. Rubery and Grimshaw (2015, p. 326) challenge the view that women have not graduated in the 'right' subjects by pointing to the increasingly high proportion of women internationally entering accountancy, economics, medicine and law. Financial services has considerable discretion in how it recruits, whom it recruits, whom it promotes and for which occupations – therefore we must conclude that our findings further endorse the institutional undervaluation of women in finance and the resilience of its discriminatory gendered culture, most recently evidenced by the Treasury Committee (2018).

In line with Rubery and Grimshaw (2015), our study showed that workplace practices are imbued with inherent discriminatory elements with the EHRC (2009, 2011) and Treasury committees (2010, 2016, 2018) revealing how far the sector has to travel to give women equal opportunities, including changing workplace practices, systems and culture. Despite repeated studies on the negative impact of the gendered culture, the 2018 Treasury Committee still found that the 'alpha male' is part of the problem. It would appear that even the beneficiaries of multiple awards for their diversity work, such as Lloyds Banking Group, reported a broadly average sector pay gap and a much higher than average sector bonus gap. It may be that, in line with Kirton et al's (2016) study, diversity is not recognised by line managers who have discretion over bonuses and therefore can undermine diversity initiatives where diversity is not a strategic priority.

The study also demonstrated that unions sought control and influence over work processes in their persistent push for equality audits, both in bargaining and holding financial services' employers to account, and in their guidance to union representatives. Unions also sought political influence through their evidence to the 2010 Treasury Committee. Nevertheless, despite some common aims, the IR actors had differing interests. Unions emphasised challenging injustice with respect to long and unpaid working hours, casualization, low pay as well as the pay gap, whereas the Treasury emphasised the business-case for improving women's representation and reducing the pay gap.

Union presence and collective bargaining were found to be moderating influences encouraging transparency and questioning pay systems. Moreover, the study revealed an under-researched premise that union membership led to a lower pay gap for women with children. This is likely to be a clear outcome of union engagement with pay data and encouraging equality audits with organisations and their union representatives. Despite Forth and Millward's (2002) research showing no demonstrable union wage premium for private sector workers in general and declining union density and union coverage in finance (Gall 2017), our research has resonance with Elvira and Saporta's (2001) findings that unionization is associated with smaller gender gaps.

Despite the EHRC (2009) Inquiry highlighting the relevance of long working hours to women's equality, we found that post-recession working hours have increased, thus confirming Unite's 2014 survey results and its evidence to the 2010 Treasury Committee. Moreover, these countervailing pressures of increased working hours and presenteeism have had a negative effect on the gender pay gap indicating that if hours continue to lengthen any future reduction of the pay gap will be hindered.

Gender was not the only discrimination effect in our analysis but also ethnicity, suggesting that attention to gender alone is not sufficient, but that its intersectional relationship with ethnicity is important. This follows recent policy and academic interest in the ethnic pay gap (Corlett, 2017; EHRC, 2017; Green et al., 2014; Heywood and Parent, 2012; Tomaskovic-Devey, 1993; TUC, 2016) and reflects research findings that multiple protected characteristics have a disproportional effect on the pay gap (Woodhams, Lupton, and Cowling, 2015; Woodhams, Lupton, Perkins, et al., 2015).

In conclusion, the gendered culture of financial services has been resistant to change (Treasury Committee 2018). The multi-pronged forces on financial services has elicited only small progress in challenging 'unsafe remuneration policies' and responding to the EHRC Inquiry. It is evident that despite the arguments for change, the 2018 Treasury Committee confirmed that gender equality is not a strategic priority for financial services but, again reflecting a voluntarist approach, stated that strategies and progress will be monitored (2018:21). Our results indicate that the success of HM Treasury Charter initiative is contingent on improving women's representation at senior levels but also tackling unfair pay systems and culture-change at all levels of the earnings distribution. Notwithstanding the gender equality actions by state institutions, organisations and unions that have taken place,

albeit, in the context of the fall-out from recession, it is hard not to surmise that such voluntary approaches are not enough. Does our research have implications for the likely success or otherwise of mandatory pay gap reporting? The financial services experience suggests that without regulatory sanctions, reducing the pay gap is likely to be a slow, fragmented and uneven process and require committed employment actors, whether unions, diversity experts, women's networks, to continually challenge financial services' discriminatory norms and values against a strong cultural disconnect with inequalities.

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Table 1
Summary statistics, by gender and recession periods

	Male			Female		
	Pre-recession	During-recession	Post-recession	Pre-recession	During-recession	Post-recession
	Mean	Mean	Mean	Mean	Mean	Mean
Real hourly wage (£)	25.06	27.52	25.91	14.92	16.32	16.73
Log (Real hourly wage)	3.00	3.06	3.03	2.56	2.63	2.64
Aged 16-21[R]	0.04	0.04	0.02	0.06	0.05	0.03
Aged 22-25	0.09	0.08	0.07	0.10	0.09	0.08
Aged 26-30	0.15	0.14	0.13	0.14	0.14	0.14
Aged 31-35	0.18	0.16	0.16	0.17	0.14	0.15
Aged 36-40	0.17	0.18	0.16	0.16	0.18	0.15
Aged 41-50	0.25	0.27	0.29	0.24	0.27	0.28
Aged 51-60	0.11	0.12	0.15	0.12	0.13	0.15
Aged 61-64	0.01	0.02	0.02	0.01	0.01	0.02
No qualification[R]	0.01	0.01	0.01	0.03	0.03	0.02
Other qualification	0.05	0.05	0.03	0.08	0.07	0.04
GCSE grades A*-C or	0.19	0.18	0.15	0.38	0.37	0.31
GCE A level or equivalent	0.29	0.28	0.25	0.26	0.25	0.27
Higher education	0.09	0.07	0.08	0.07	0.07	0.08
Degree or equivalent	0.37	0.41	0.49	0.18	0.21	0.29
Ethnicity	0.94	0.91	0.89	0.95	0.94	0.91
Tenure	0.97	0.98	0.97	0.97	0.98	0.98
Elementary[R]	0.01	0.01	0.01	0.01	0.01	0.01
PP and Machine Operatives	0.00	0.00	0.00	0.00	0.00	0.00
Sales and Customer Service	0.06	0.06	0.06	0.11	0.10	0.10
Personal Service	0.00	0.00	0.00	0.00	0.00	0.00
Skilled Trades	0.01	0.01	0.01	0.00	0.00	0.00
Administrative and Secretarial	0.16	0.15	0.14	0.47	0.43	0.42
Associate Professional and	0.25	0.26	0.33	0.18	0.20	0.23
Professional	0.14	0.13	0.22	0.05	0.06	0.11
Managers and Senior Officials	0.36	0.39	0.23	0.18	0.20	0.13
Single[R]	0.37	0.35	0.33	0.33	0.32	0.33
Married	0.57	0.57	0.61	0.54	0.53	0.54
Others	0.06	0.09	0.07	0.14	0.15	0.14
No dependent children[R]	0.06	0.06	0.06	0.05	0.05	0.05
Children aged <5	0.15	0.14	0.16	0.13	0.13	0.14
Children aged 5-11	0.12	0.14	0.15	0.15	0.14	0.15
Children aged 12-16	0.08	0.09	0.08	0.09	0.10	0.09
Children aged >16	0.59	0.57	0.55	0.58	0.58	0.56
Establishment size <20[R]	0.15	0.12	0.15	0.23	0.25	0.23
Establishment size 20-49	0.12	0.12	0.10	0.15	0.11	0.13
Establishment size 50-249	0.20	0.19	0.19	0.18	0.17	0.17
Establishment size 250-499	0.15	0.15	0.14	0.13	0.15	0.13
Establishment size 500+	0.39	0.43	0.42	0.32	0.32	0.34
Training offered	0.84	0.84	0.55	0.85	0.81	0.53
Experience: <3 months[R]	0.04	0.04	0.03	0.04	0.03	0.03
Experience: 3-<6 months	0.04	0.03	0.04	0.04	0.03	0.03
Experience: 6-<12 months	0.07	0.08	0.06	0.06	0.06	0.05
Experience: 1-<2 years	0.11	0.11	0.10	0.10	0.10	0.08
Experience: 2-<5 years	0.23	0.24	0.22	0.21	0.19	0.20
Experience: 5-<10 years	0.19	0.19	0.22	0.19	0.22	0.21
Experience: 10-<20 years	0.18	0.17	0.20	0.22	0.19	0.23
Experience: >20	0.13	0.14	0.13	0.14	0.18	0.18
N	6,043	1,313	6,857	7,538	1,569	7,140

Source: Labour Force Survey for various quarters.
Note: R indicates reference categories in the estimated equation.

Table 2
The average hourly pay differential by recession periods

	Pre-recession	During-recession	Post-recession
Raw (log) real hourly pay[a]	-0.413***	-0.401***	-0.365***
	[0.010]	[0.022]	[0.010]
Conditional (log) real hourly pay[b]	-0.174***	-0.148***	-0.134***
	[0.008]	[0.020]	[0.009]
Individual- and job-characteristics	Yes	Yes	Yes
Adjusted R^2	0.52	0.51	0.49
Observations	13,581	2,882	13,997

Source: Labour Force Survey dataset for various quarters.

Note: Hourly pays are in 2015 pound sterling. Robust standard errors are in the brackets. (a) While the raw wage differential is obtained by simply regressing (Log) real hourly pay on female using OLS regression, (b) the conditional pay differential is obtained regressing (Log) real hourly wage on female and various characteristics (age groups, education, ethnicity, job tenure, occupation, marital status, establishment size, training, and experience): reference categories are – age group: Aged 16-21; education: No qualification; occupation: Elementary; marital status: Single; Dependent children: No children; and establishment size: Est. size <20. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Table 3
Summary of decomposition results

VARIABLES	OLS		
	1	2	3
	Pre-recession	During-recession	Post-recession
Differences in hourly pay	0.413***	0.401***	0.365***
	[0.000]	[0.000]	[0.000]
Endowment effects			
Age	0.007***	0.001***	0.005***
	[0.000]	[0.000]	[0.000]
Education	0.048***	0.065***	0.049***
	[0.000]	[0.000]	[0.000]
Ethnicity	-0.001***	-0.002***	-0.001***
	[0.000]	[0.000]	[0.000]
Tenure	-0.000***	-0.001***	-0.000***
	[0.000]	[0.000]	[0.000]
Occupation	0.187***	0.183***	0.177***
	[0.000]	[0.000]	[0.000]
Marital status	-0.002***	-0.003***	0.003***
	[0.000]	[0.000]	[0.000]
Dependent children	-0.002***	0.002***	0.000***
	[0.000]	[0.000]	[0.000]
Establishment size	0.020***	0.025***	0.020***
	[0.000]	[0.000]	[0.000]
Training	0.000***	-0.001***	0.000***
	[0.000]	[0.000]	[0.000]
Experience	0.001***	0.001***	-0.002***
	[0.000]	[0.000]	[0.000]
Total	0.258***	0.271***	0.250***
	[0.000]	[0.000]	[0.000]
Discrimination effects	0.155***	0.130***	0.115***
	[0.000]	[0.000]	[0.000]

Source: Labour Force Survey dataset for various quarters.

Note: Decomposition at the mean. Male wages is the reference category. A positive value suggests an advantage in favour of males. The explanatory variables are as defined in supporting information, Appendix Table B1. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Table 4
Distributional decomposition at selected quantiles for pre-, during-, and post-recession periods

	Pre-recession					During-recession					Post-recession				
	$q = 0.1$	$q = 0.25$	$q = 0.50$	$q = 0.75$	$q = 0.90$	$q = 0.1$	$q = 0.25$	$q = 0.50$	$q = 0.75$	$q = 0.90$	$q = 0.1$	$q = 0.25$	$q = 0.50$	$q = 0.75$	$q = 0.90$
Differences in observed hourly pay	0.135***	0.261***	0.485***	0.570***	0.583***	0.155***	0.294***	0.486***	0.556***	0.558***	0.130***	0.273***	0.464***	0.502***	0.462***
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Endowment effects															
Education	0.003***	0.040***	0.067***	0.075***	0.064***	0.039***	0.040***	0.079***	0.096***	0.074***	0.019***	0.052***	0.060***	0.069***	0.048***
Occupation	0.185***	0.306***	0.233***	0.139***	0.082***	0.131***	0.305***	0.208***	0.138***	0.088***	0.162***	0.306***	0.212***	0.146***	0.077***
Total	0.218***	0.365***	0.315***	0.240***	0.174***	0.182***	0.350***	0.310***	0.255***	0.171***	0.195***	0.372***	0.300***	0.249***	0.148***
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Discrimination effects	-0.083***	-0.104***	0.169***	0.329***	0.409***	-0.027***	-0.056***	0.176***	0.301***	0.387***	-0.065***	-0.099***	0.164***	0.253***	0.313***
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]

Source: Labour Force Survey dataset for various quarters. See the notes in Table 2. For brevity, only few characteristics, that are important, reported.

Table 5
Oaxaca-Blinder decomposition: controlling for additional control variables

VARIABLES	Contribution of hours worked			Contribution of bonuses			Contribution of trade union and collective bargaining		
	1	2	3	4	5	6	7	8	9
	Pre-recession	During-recession	Post-recession	Pre-recession	During-recession	Post-recession	Pre-recession	During-recession	Post-recession
Differences in observed (log)	0.404**	0.398***	0.350**	0.438**	0.323***	0.364**	0.424**	0.506***	0.325**
	[0.000]	[0.001]	[0.000]	[0.000]	[0.001]	[0.000]	[0.001]	[0.001]	[0.000]
Endowment effects									
Log(# hours worked)	0.020**	0.046***	0.028**						
	[0.000]	[0.000]	[0.000]						
Bonuses				0.024**	0.013***	0.013**			
				[0.000]	[0.000]	[0.000]			
Member of trade union							0.007**	0.014***	0.008**
							[0.000]	[0.000]	[0.000]
Pay/condition affected by							0.017**	0.028***	0.008**
							[0.000]	[0.000]	[0.000]
Total endowment effects	0.274**	0.308***	0.273**	0.282**	0.237***	0.251**	0.273**	0.319***	0.250**
	[0.000]	[0.001]	[0.000]	[0.000]	[0.001]	[0.000]	[0.001]	[0.001]	[0.000]
Discrimination effects	0.130**	0.090***	0.077**	0.157**	0.085***	0.113**	0.151**	0.187***	0.074**
	[0.000]	[0.001]	[0.000]	[0.000]	[0.001]	[0.000]	[0.001]	[0.001]	[0.000]

Source: Labour Force Survey dataset for various quarters. See the notes in Table 2.

Table 6
The effect of EHRC report on wages in Financial Services Sector (FSS)

	1	2	3	4
FSS*EHRC*Female (DDD effect)	**0.026****	**0.027*****	**0.026*****	**0.029*****
	[0.013]	**[0.009]**	**[0.009]**	**[0.009]**
Observations	690,279	690,279	690,279	689,830
All characteristics	No	Yes	Yes	Yes
Time dummies	No	No	Yes	Yes
Sector dummies	No	No	No	Yes
Adjusted R^2	0.05	0.50	0.50	0.51

Source: Labour Force Survey dataset for various quarters.
Note: Hourly pays are in 2015 pound sterling. Standard errors are in the brackets. The results are based on difference-in-differences-in-differences (DDD) estimation. FSS is a dummy variable takes one if UK Financial Services Sector, or else zero. EHRC is an indicator variable that takes one in q3 2009 and thereafter, or else zero. Female dummy takes one if female. For brevity, all other interaction terms are included, but not reported. ***, **, and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

[i] Labour Force Survey 2008: Q3.
[ii] Labour Force Survey 2017 https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/uklabourmarket/august2017#public-and-private-sector-employment-first-published-on-14-june-2017 accessed 29 August 2017
[iii] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/519620/women_in_finance_charter.pdf accessed 22 February 2018

[iv] http://projects.exeter.ac.uk/RDavies/arian/scandals/behaviour.html. Accessed 27 August 2017
[v] https://www.lloydsbankinggroup.com/our-group/responsible-business/inclusion-and-diversity/ accessed 29 August 2018.

[vi] https://www.out-law.com/en/articles/2018/july/alpha-male-culture-fuelling-gender-pay-gap-in-financial-services/ accessed 20 August 2018
[vii] e.g. 23 November2015, Finance Industrial Sector Conference.
[viii] Hourly Pay variable is pre-defined in LFS database – it is constructed by dividing gross weekly pay (in the main job) by the total hours worked in that reference week of the survey. For details, see: Volume 4: LFS standard derived variables' 2016, page 209.

[ix] Methodological issues in the production and analysis of longitudinal data from the Labour Force Survey, GSS Methodology Series nr 17; LFS User Guide 2003, Volume 1, Section 11. Accessed 1 September 2017.
[x] We confirm our decomposition results using Juhn-Murphy-Pierce (JMP) type of decomposition procedure. It also shows that the total gender pay differentials declined after the recession, consistent with Oaxaca-Blinder approach (see suppinfo for details).

[xi] Detailed decomposition of each of the characteristics and other results is available from the authors upon request.
[xii] To check gender pay gap in each of the sub-sectors in financial services: (65) Financial intermediation; (66) Insurance and pension funding; and (67) Activities auxiliary to finance, we re-run OLS regression and find that pay gap exists in each of them (see Table B2 suppinfo).

[xiii] See Appendix B (suppinfo) for a detailed explanation on the DDD approach. See also the evidence of the existence of ‘parallel trends’ assumption.